The Wrack Line



Newsletter of Parker River National Wildlife Refuge • Newburyport, MA

United States Fish & Wildlife Service

MAT Team Removes Derelict, Decaying Structures At Great Bay NWR

By Frank Drauszewski, Deputy Refuge Manager

During a two week period in early December, four U.S. Fish and Wildlife Service (FWS) maintenance workers employed various pieces of heavy equipment to remove 17 buildings from three locations at Great Bay NWR. The specially formed Maintenance Action Team (MAT), comprised of refuge maintenance staff, completed the work using both FWSowned and rented equipment. Two members of the team were drawn from other refuges, including Kirk Cote from Aroostook NWR (Limestone, ME) and Paul Thibodeau from Lake Umbagog NWR (Errol, NH). Parker River's own Bob Springfield and Tajuan Levy filled out the MAT team roster. Regional Heavy Equipment Coordinator Bill Starke assisted greatly by arranging equipment and dumpster rentals.

The team used a large, rented excavator, a FWSowned medium-sized excavator, a backhoeloader and an ASV Positrac (tracked skid steer)



to complete the work. Twenty five - 30 yard capacity dumpsters were filled with construction debris and hauled away by Waste Management Inc. Approximately 75 tons of



metal was removed by a scrap metal dealer. Concrete block and foundation materials were buried on site.

Before any demolition work could be undertaken, and in accordance with a Memorandum of Understanding between the FWS and the New Hampshire State Historic Preservation Officer (SHPO), a property documentation report was completed to determine and document the presence of any historically significant and/or National Register -eligible structures. With the SHPO's concurrence, the way was cleared for the planned demolition work.

The removal of the 17 buildings involved three areas on the refuge that contained historic or potentially historic structures. These areas are the Margeson Estate, Fabyan Point, and the former weapons storage area.

The Margeson Estate was located near Woodman Point, in a section of the refuge that is closed to the public. The estate's main house (1894) and caretaker's cottage (circa 1920's) were both listed on the National Register

of Historic Places. Since the refuge's establishment in 1992, the main house remained unoccupied. The caretaker's cottage was actually used for housing staff from 1992 to 2002. Both structures were in very poor condition, with extensive water damage and pervasive mold. They also contained asbestos and lead paint. These uninhabitable structures were frequently vandalized. The estimated cost for restoring the Margeson house alone was estimated at \$750.000. Also removed from the area near the Margeson Estate was

an old concrete block "transmitter building" - a remnant of Pease Air Force Base. It was determined during the refuge's Comprehensive Conservation Planning process that removal of these buildings was the most viable option.

The second area where demolition took place was at Fabyan Point, a peninsula at the end of Fabyan Point Road, in a section of the refuge closed to the public. Fabyan Point had a complex of six cabins situated along the Great Bay shoreline. Two of the cabins dated to the 1920's, while the remaining four cabins were built in 1947. Prior to the refuge's acquisition of Fabyan Point in 2003, the area was private property. All cabins and other structures were in very poor condition, with pervasive mold and water damage. The cabins were a frequent target for vandals and squatters. An active American bald eagle nest is located within this area. The birds should encounter less disturbance now that the cabins are gone.

The third demolition area is located within the former weapons storage area (WSA) of the old Pease Air Force Base. The site is immediately adjacent to the refuge office and parking lot. This area is surrounded by a fence and is closed to the public. The Air Force used the highly secure site for storing and maintaining various types of munitions and weapons systems.



When it was in active use, the WSA covered 50 acres and included 15 earth-covered, heavily reinforced concrete bunkers, along with various concrete block support buildings. This project removed the remaining 6 concrete block buildings. The bunkers and water tower remain. Currently, a rearing pen for New England cottontails is located within the WSA.

Before any demolition took place, FWS regional office staff conducted an environmental assessment at sites slated for demolition. An environmental checklist for each structure was prepared with asbestos surveys, lead paint surveys and overall environmental contaminant surveys completed. Asbestoscontaining materials were removed, as were oil and propane tanks. All listed items with environmental concerns were removed by licensed abatement specialists. The MAT team accomplished much more than was originally anticipated and, in the process, saved the FWS well over \$100k by doing this project in-house. Visually, all three areas of the refuge are vastly

improved in the wake of the demolition project.



FWS Proposes Great Thicket National Wildlife Refuge

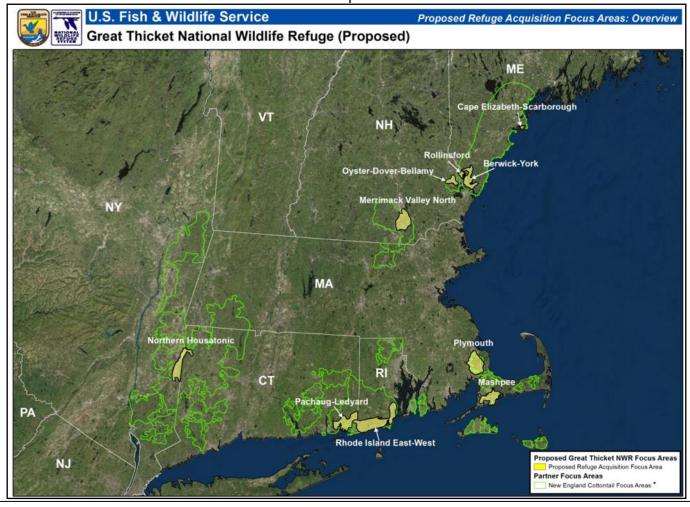
Over the past century, many shrublands and young forests across the Northeast have been cleared for development or have grown into mature forests. As this habitat has disappeared from much of the landscape, the populations of more than 65 songbirds, mammals, reptiles, pollinators, and other wildlife that depend on it have fallen alarmingly.

The U.S. Fish and Wildlife Service (Service), state wildlife agencies, private landowners and dozens of conservation organizations have responded to this urgency by restoring and protecting shrublands and young forest in New England and New York. Despite significant progress, experts have determined that more permanently protected and managed land is needed to restore wildlife populations and return balance to Northeast woodlands.

To address this need, the Service is proposing to establish Great Thicket National Wildlife Refuge, a system of public lands that would be dedicated to managing shrubland habitat for wildlife and enjoyed by visitors whenever possible.

The Service has worked with state wildlife agencies and other conservation partners using species information, modeling and spatial analysis to identify 10 refuge acquisition focus areas, across six states, including Maine, New Hampshire, Massachusetts, Connecticut, Rhode Island and New York.

The dynamic, short-lived shrubland and young forest habitats provide food and shelter for New England cottontails, American woodcock, ruffed grouse, monarch butterflies, box turtles and scores of other species. Habitat management ranging from cutting and prescribed burning to shrub planting, as well as protection of naturally sustained shrublands like wetlands,



would ensure these creatures and vibrant habitat remain a part of our landscape. While the refuge, like all national wildlife refuges, would be managed specifically for wildlife, we would seek to provide wildlife-dependent recreational opportunities whenever possible. The agency gives special consideration to hunting, fishing, wildlife observation, wildlife photography, environmental interpretation and environmental education, and uses a specific process to evaluate the feasibility of those public uses as land is acquired.



National wildlife refuges don't just provide a boost to wildlife. They are strong economic engines for local communities across the country. A 2013 national report Banking on Nature found that refuges pump \$2.4 billion into the economy and support more than 35,000 jobs. Spending by refuge visitors generated nearly \$343 million in local, county, state and federal tax revenue in 2011. Recognizing that there can be a tax loss when placing land in government ownership, the Service offsets this loss by annually contributing funds through the refuge revenue sharing program to the county or other local unit of government.

Before the Service can purchase lands to become part of the National Wildlife Refuge System, we must complete a rigorous strategic planning and public process. The draft land protection plan and environmental assessment for the proposed Great Thicket National Wildlife Refuge will be available for public review thru April 3rd. The plan explains the need for land conservation and how our proposed actions complement other conservation activities, and describes each of the 10 focus areas across the six states. The agency will evaluate comments and make a final decision in 2016 on whether to establish the refuge and begin working with interested landowners.

Photo: @Matt Poole

If approved, the new refuge would provide places for migrating monarch butterflies to fuel up on nectar-producing plants.

If the plan is approved after the public comment period, the agency could begin working with willing and interested landowners to acquire approximately 15,000 acres through conservation easements or fee-title acquisition. Current refuge staff would manage all acquired lands within existing resources. If the plan is approved, this process would take decades, as the Service works strictly with willing sellers only and depends on funding availability to make purchases.

To learn more about the proposed refuge:

http://www.fws.gov/northeast/refuges/planning/lpp/greatthicketLPP.html

Snow Buntings: That Other Arctic Visitor

By Linda Schwartz, Volunteer Refuge Naturalist

The snow bunting (*Plectrophenax nivalis*), is a small visitor from the Arctic. Unlike the snowy owl, they belong to the songbird Order Passerines and are not predators. They are the northernmost occurring member of that Order. The next most northern occurring passerine is the raven. Snow buntings are sometimes referred to as "snowflakes" which you will understand as soon as you see them fly. They generally arrive in late fall and depart at the first signs of spring. They are frequently seen in open areas, such as fields, or even around the gravel paths at the refuge. They can also be seen around the dunes and on the beach basically anywhere they can find seeds, or even small insects, to eat. They can also be found in many farm fields. Their winter range is the northern temperate zone including; Canada and the United States, northern Germany, Poland, Ukraine and into Central Asia.

Snow buntings are considered a medium-sized passerine. Their wing-span is 13-15 inches. Their body is just under 6 inches in length, including the tail. They weigh one to one and a half ounces. They are further characterized by white underparts, with black and white on the wings and back. There is a rufous coloration on the back and face, and usually a bit of a rufous collar visible on the throat. The bill is yellow with a black tip. The male's bill is all black





during the breeding season. While they are on their wintering grounds, both sexes have some rufous coloration on their backs. Unlike many passerines, they do not molt into new plumage in the spring. The breeding coloration is caused by the wear and abrasion on the feathers; the male actively rubs off the tips of the feathers in the snow. The male is all black and white, with black wingtips, during the breeding season. The female retains some of her rufous coloration.

The snow bunting is one of the few passerines to have feathers on their tarsus bones (the bones that many people think are their thighs, but in reality are the bone that appears to be the base of the leg). They were formerly grouped with American sparrows, juncos and towhees, but they are now grouped with longspurs, another winter visitor in these latitudes. There are four subspecies with slight differences in the plumage patterns of breeding males. The subspecies have different distributions in the Arctic. Their breeding range is circumpolar — meaning throughout the northern hemisphere.

The breeding range of the snow bunting is in the very high latitudes of the Arctic tundra, similar to the breeding areas of the snowy owl. Their southern breeding range is limited by the duration of daylight, which appears to affect their reproductive activity. Their home is the Arctic tundra of North America, Ellesmere Island, Iceland, and some of the higher

elevations in Scotland, Norway, Russia, Siberia and North Greenland.

They are the first migratory species to arrive at their Arctic breeding grounds, with the males arriving earlier than the females — around the beginning of April. The females arrive 4-6 weeks later, when the snow starts to melt. The reason for this early arrival is most likely so the males can stake out a territory. They are highly territorial during the breeding season. The quality of their nesting territory is crucial to their success in raising young. Resources are scarce in the tundra and they need to secure the best food sources in order to raise their young.

Snow buntings start their southward migration around September, or as late as November. The females tend to be the first to leave, followed by the males and then the juveniles. The females tend to winter a bit further south than the males. They migrate at night, mostly following the geomagnetic field of the earth; apparently they do not rely on visual cues. Prior to migration, a snow bunting needs to gain about 30% of their weight — an amazing feat repeated by many migratory species. Migration is very costly from an energy standpoint.

A snow bunting's diet varies according to the season. During the winter they rely on a lot of weeds, leaf buds and plant seeds. On the breeding grounds they rely more on berries, insects and other invertebrates. Many passerines rely more on the high protein of invertebrates during breeding season to help raise their young. The rapid growth of chicks requires a high protein diet and they are fed exclusively invertebrates.

On the breeding grounds, the female lays her clutch of 2-7 eggs as soon as the temperature reaches 32 degrees Fahrenheit, usually around June. It is quite a feat to keep the eggs warm enough to continue development in such temperatures. The male will bring food to the female while she is incubating, so she does not have to leave the nest and risk the eggs getting chilled. Even though the temperature may be around 32 degrees, the rocks where the



nests are located stay rather cool. Like many songbirds, they have a short incubation of 12-13 days and the chicks are able to fly after another 12-14 days. The parents continue to feed the chicks for another 8-12 days. They will usually raise only one clutch per year, except in some of their more southern breeding areas, where they sometimes raise two clutches. Their nests are located on the ground in cavities among the rocks. They look for an area rich in vegetation such as wet sedge meadows or areas rich in particular types of vegetation such as dryas and lichens.

The snow bunting is considered a common species, with a global breeding population estimated at 30 million (with about 25% of the total population wintering in the United States). Partners in Flight considers them to be a common species in steep decline, while other organizations do not seem to view them in quite as steep a decline. It is believed that global warming (that brings warmer spring times) will have an effect on snow buntings, causing them to lav eggs before the invertebrates they rely on are plentiful, causing the loss of many nestlings. It will possibly favor the survival of a second clutch of young. The warmer springs are also thought to bring more competition for the species and thus less breeding success. Another threat to this species includes the use of pesticides on crops, since agricultural crops make up a large part of their winter diet.

Becoming a Wildlife Detective

By Jean Adams, Outdoor Recreation Planner

A fox pounces on a mouse, gulps it down and continues on his way. As it trots, it spies a cottontail and races after it. The rabbit dodges and swerves with the fox in hot pursuit. Within inches of the snapping jaws, the rabbit reaches the safety of a groundhog hole. Nearby, a whitetail deer doe has left her daytime bed and watches the activity with mild interest. Undaunted by failure, the fox gets wind of a pheasant. The bird, however, is alerted by the fussing of a crow and escapes the fox's rush, landing in a nearby field to feed on some waste corn.

This scene was not directly witnessed; rather, was interpreted by reading animal "sign" in the snow. Interpretation of such clues as tracks, tufts of fur, broken seeds, or tamped down grass can lead to the unfolding of complete stories. When all the pieces are assembled into one picture, the sense of satisfaction is all the incentive needed to encourage one to search for more clues. Being a wildlife detective is hard work. When hunting and trapping were a way of life, people learned to read wildlife sign as one would read a book. They could look at a track or tuft of fur and be able to tell what type of animal had passed, when it had passed, and what it was doing. Reading sign was an

essential skill—one developed when very young and continually improved upon throughout life.

Unfortunately, many of us today are completely



oblivious to such signs. Unlike our forefathers, we feel that these messages do not have immediate value in our lives. That's an incorrect assumption. Natural signs such as tracks, cast-off skins, bark scratches, feathers and overturned leaves all have the potential to enrich our lives by giving us a better understanding of wild creatures and the workings of nature.

Wildlife observation is not limited to any particular place, season or time of day and it offers considerable opportunity for direct interaction with nature. As an animal sign is examined, our curiosity is piqued and questions come to mind. As soon as one question is answered, more arise. This is the beauty of investigation — it is continually expanding and leading to new discoveries.

Your "detective work" need not be limited to the woods. Material for observation is all around. You can practice watching how signs are made by domestic animals, squirrels in your backyard, and even people. And then it's a simple matter of going back and interpreting them. After watching a squirrel bury a nut, go over to that spot. Try to visualize how that squirrel looked as it turned over that leaf and dug into the ground. As you

become more skillful at interpreting



wildlife sign, you will be able to add more and more to the overall picture.

It is a good idea to write down your observations, especially any unusual ones. These notes might contribute more data to the information already known about an animal. It is also just plain fun to go back and read about the



pleasant times you had deciphering a jumble of tracks or listening to the haunting coo of a mourning dove. A whole new world has opened up.

So open your eyes. Look around. Each day there are stories to be told in the snow and in the soil, in the wood and in the water. All it takes is a willingness to open your eyes and mind to the natural world. With a little practice and perseverance, you can discover a cache full of knowledge and a new appreciation for what is right outside your door. Delight in the ordinary and you may find that in nature there is often more than meets the eye. Happy tracking!



New Refuge Book Club!

By Kaytee Hojnacki, Biological Technician

An exciting new program was recently added to the already extensive list of monthly public programs at the refuge. A monthly book club, featuring environmental and wildlife-related books, began in January. During two separate discussion groups that month, participants conversed about Rachel Carson's *The Edge of the Sea*, while snacking on homemade treats. Written almost as a glorified field guide to the Atlantic seashore, the readers were awed by Carson's focus on the diversity of life in such a small, harsh zone. Views about the book varied, leading to a very lively conversation.

Heading across the country, and switching from a heavily science-based book to more of a personal reflection, February's book gave readers a look into the healing power of nature. *Refuge,* by Terry Tempest Williams, is another classic that demonstrates the power of nature to both cause destruction and to act as a sanctuary. Participants in both discussion groups agreed that this was a fantastic read. In fact, for several group participants, this was the second time they had read the book.

The Parker River NWR Book Club will continue through the winter, with the hope that it may turn into a yearlong program. March's book selection is *The Narrow Edge: A Tiny Bird, an Ancient Crab, and an Epic Journey* by local author Deborah Cramer. This recently published book explores the plight of the red knot and the horseshoe crab. The next discussion group is scheduled for Thursday, March 17th, 6:30 – 7:30 pm at the refuge visitor center. This program is free and open to the public, although **preregistration is required**. To register, call the refuge office at (978) 465-5753.

Biologists in the Winter

By Kaytee Hojnacki, Biological Technician

Many people wonder what our biologists do during the colder months. It's easy to see how busy they are during the summer. They are those people covered in muck in the middle of the salt marsh, or being attacked by greenheads on the beach looking for plovers, or worse yet, fully clothed in long-sleeves carrying a 40 pound backpack full of herbicide on our quest to eliminate pepperweed from the Great Marsh. Once the temperatures drop, and especially when the snow starts flying, those stalwart individuals are nowhere to be seen out on the landscape of the refuge. Have no fear; they are still hard at work.

All summer long, the biology staff is out on the refuge collecting data on all kinds of plants and animals. You can find them in every habitat, surveying the vegetation, counting birds, or perhaps catching fish. With the help of summer interns and volunteers, we are able to get an almost super-human amount of work done. But with data collection comes data entry, a very key part to the biological puzzle. Some data is entered into specially designed databases, others into Excel spreadsheets. Graphs and maps are made, trends are compared from year to year, and a massive annual report is written that summarizes everything we did over the past year. This report allows us to reflect on our current management strategies, and to evaluate the need for future changes to meet the needs of the plants and animals found on the refuge.

If you think that sounds like a piece a cake and like the biologists are just relaxing all winter, fear not, there's more. Winter is the time for grant writing to obtain needed money. Most of our biological program is funded through grants. There is also the large amount of reporting to State, Federal, and various other partners on work completed. While biologists throughout the Northeast are all pretty well confined to the indoors, they find it the perfect



time to conduct meetings and conferences to share information among each other. Then there are the numerous maintenance projects to clean and repair gear in preparation for next year's field season.

While the work might not stop and, truthfully, only slows down slightly, the biologists do take advantage of the slower time to branch out more into the visitor services realm. This winter we have offered a number of training sessions for interested volunteers on a range of topics, including climate change and endangered species. This allows refuge volunteers, who do the most interacting with the general public, to better understand some of these key topics and be able to educate visitors and answer their questions. A popular new book club, initiated by one of our biologists, has taken the form of lively discussion groups in the refuge visitor center.

It might seem that winter drags on forever, but spring will be here before we know it. The birds will return, the plants will burst forth with new leaves, and the biologists will be back out on the refuge. When you see us, feel free to stop by and chat. We always like to discuss our work and this great place we call Parker River National Wildlife Refuge!

Meet Refuge Volunteer Michael O'Donnell!

By Jean Adams, Outdoor Recreation Planner

If you have visited the visitor contact station (VCS) at parking lot 1 in the summertime, chances are you have seen Michael O'Donnell. For the last 3 years, Michael has been the only volunteer to regularly staff that small, but useful information desk. In fact, he has been working at the VCS longer than any other volunteer – past of present – over the last 15 years. I remember Michael in 2001 and 2002 working 40 hour weeks at the "old" VCS, when he would only take time for a lunch break!

Michael was very dedicated back then—and he still is now. For the last eight years, he has also had the Tuesday afternoon shift at the main refuge visitor center. During the summer months he adds six more hours per week by working at the VCS. As if that wasn't enough, last year Mike decided to co-lead the refuge bike tours. He's one busy guy!

It's always so nice to see him at the desk—as he always has a smile and is ready to share his vast knowledge about the refuge and its many activities. In addition to his information desk stints here at Parker River, Michael has volunteered at the Newburyport Library and at the Massachusetts Audubon at Joppa Flats Education Center. He is very community-oriented.

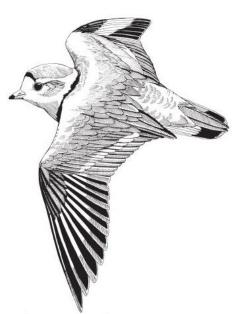
An accomplished photographer, Michael has had many showings of his photos in local venues. He is a world traveler fluent in French and very knowledgeable about places and cultures far and wide. His many diverse experiences garnered from his travels abroad come in handy at the information desk and he is able to answer questions with a demeanor that puts people at ease no matter if they are from around the corner or across the globe.



Michael says that he loves helping everyone who comes to the refuge and hopes that the information he supplies enhances their visit. He especially enjoys talking about the piping plover and the refuge's role in protecting this threatened species.

When asked what advice he would give to potential volunteers, Michael says that he would tell them to keep their focus on the visitor, as everyone who walks through that door is important. He loves emphasizing the

value of the refuge and of maintaining open spaces. His dedication is admirable and we appreciate his many years of friendly service. I am sure the refuge visitors appreciate it as well. Thank you, Michael!



What's in a Name? Ermine or Short-tailed Weasel

By Jean Adams, Outdoor Recreation Planner

If you have spent any amount of time on the refuge, chances are you have come across this common (but fast-footed) mammal: the short – tailed weasel (STW). If you see this creature in the winter, however, you may think you are seeing something entirely different – an ermine. Truth is, they are the same animal, only wearing different coats. The term "ermine" is often the name given to the STW in its white phase (though it is also applicable in the brown phase). STWs are the only member of the weasel family (*Mustelidae*) that change color. (Other mustelids include long-tailed weasel, mink, otter, fisher, mink, and skunk.)

Most of us are familiar with the ermine coats worn in the portraits of royalty - those pure white furs with the black tips scattered throughout (the black tip of the short tailed weasel's tail). But few of us know that this fur is brown in the other seasons (and not as luxurious).

Changing its coat from brown to white has more to do with the length of daylight than the drop in temperature, though temperature does play a role (has to be cold enough for snow). It is interesting to note that in the more southern reaches of its range, the STW is less likely to change color so dramatically, if at all.



The presence of snow is obviously a factor in the weasel's color change.

It's easy to see the advantage of being white in winter, especially if you are a creature that is a voracious hunter. Camouflage comes in handy when you are out scouring the grasses and woods for mice, shrews and voles. It helps to be stealthy. The white coat blends in perfectly with the snow and makes the short-tailed weasel a very successful winter hunter.

Except for the mating season, the STW is a solitary creature. The female tends to the young, and is an exemplary parent. I recall watching a female STW carry her young, one by one, across the refuge road near Sandy Point State Reservation. Startled by an oncoming car, she dropped one her the kits in the road. I immediately walked up to the little weasel in an effort to protect it from traffic. Suddenly, the mother came out of the grass and, while standing up on her toes and chattering defiantly at me, grabbed the baby and ran off to safety. It didn't seem to matter that I was 100 times bigger than she was; she meant business!

Although STWs have devastated the bird populations in New Zealand (where they were introduced to control rabbits), they do far more good than harm here (especially agriculturally), by eating vast quantities of rodents. They do not dig their own holes, but will often occupy the home of the critter they had for dinner, thus keeping more rodents from setting up house. Rotten logs, tree roots, and rock walls are also good spots to host a STW.

So whatever you call it – ermine or short-tailed weasel – it's an interesting creature that is a year round resident on the refuge. Looking for the showy winter coat of the STW also gives you a good excuse to get outside and walk the refuge road and trails. Maybe you'll get lucky enough to see a flash of white run across the road; an ermine on the hunt.

2016 Merrimack River Eagle Festival a Huge Success!

By Linda Stewart, Refuge Volunteer

How many events are free these days? More than 700 people – including lots of kids and their parents – stopped at the refuge visitor center on Saturday, March 5th to participate in the 2016 Merrimack River Eagle Festival. Moms and Dads enjoyed watching their children at the craft tables, listened to the live owl presentation, and used binoculars to identify birds at the center's feeding station.

Refuge volunteers helped to make this event very successful. They enthusiastically taught and shared their experiences. Many also stayed around after the event had ended to help put the visitor center back in order.

Weekends at the visitor center are very busy, and getting more so as the warmer weather begins to return. Interested in participating in a refuge program or event? If so, check out our monthly schedule on line:

http://www.fws.gov/refuge/parker river/.

Interested in volunteering at the refuge? If so, please contact Jean Adams, volunteer coordinator at (978) 465-5753, extension 208 or via email at jean_adams@fws.gov.



Gyotaku—or
Japanese fish
printing —
has become a
"go-to"
hands-on
activity for
kids at many
of the
refuge's
public events.







Second Annual:

American Conservation Film Festival

NORTH!

By Matt Poole, Visitor Services Manager

The refuge's second annual American Conservation Film Festival NORTH is primed and ready to go for the weekend of April 1st – 3rd. And it's all FREE! As was the case for last year's inaugural festival, we have "cherry-picked" a diverse array of award-winning films that focus on such topics as international bird conservation, the biodiversity of a unique southern forest type, an "up close and personal" view of life in an osprey nest, the story of one city's effort to recycle its entire waste stream, and the mating rituals of New Guinea's celebrated birds of paradise.

This year's festival includes an effort to showcase a collection of "animal films" that were specifically selected for kids and families. This special lineup, which includes the wildly popular "Flight of the Butterflies," will be screened on Saturday morning and then again on Sunday morning. As an added enticement, our monarch educator, Katie Hone, will be "in the house" on Saturday morning to facilitate monarch-related, hands-on activities for the younger kids.

Here are a few highlights from this year's lineup of conservation films:

The Messenger: Imagine a World Without Birds: This wide-ranging and contemplative documentary explores our deep-seated connection to birds and warns that the uncertain fate of songbirds might mirror our own. Moving from the northern reaches of the Boreal Forest to the base of Mount Ararat in Turkey to the streets of New York, *The Messenger* brings us fact-to-face with a remarkable variety of human-made perils that have devastated thrushes, warblers, orioles, tanagers, grosbeaks and many other airborne music-makers.



Racing to Zero: This is a quick-moving, upbeat documentary presenting new solutions to the global problem of waste. By simply substituting the word RESOURCE for the word GARBAGE, a culture can be transformed, and a new wealth of industries can emerge. Three years ago the mayor of San Francisco pledged to achieve zero waste by 2020. *Racing to Zero* tracks San Francisco's waste stream diversion tactics and presents innovative new solutions to waste. This film documents a surprising, engaging and inspiring race to zero.

Secrets of the Longleaf Pine: The all but forgotten Longleaf Pine forest once blanketed the coastal plain of the Southeastern United States. Once comprising ninety million sprawling acres, by the 20th century, human pressures had reduced the forest to just three million. Just a tiny fraction of precious old growth remains. These remarkable patches of old growth Longleaf forest display more biodiversity than another ecosystem in the northern hemisphere, rivaled only by the Amazon. Secrets of the Longleaf Pine takes you on an unprecedented journey to examine some of the unique plants and animals that can only be found here.

Unbranded: Four young Cowboys hatch an outrageous plot to adopt, train, and ride a string of wild mustangs 3,000 miles from Mexico to Canada through the wildest terrain of the American West. The trip became an epic

journey of self-discovery, tested friendships, and iconic landscapes that included runaway horses, a sassy donkey, perilous mountain passes, rodeos, sickness, injury, and death. The Audience Award winner at Telluride Mountainfilm and Hot Docs Film Festival, *Unbranded* is a soaring tale of danger and resilience, an emotionally charged odyssey that shines a bright light on the complex plight of our country's wild horses.

Winged Seduction: They have the campiest costumes and the craziest mating game in the feathered kingdom. No other birds on earth go about the business of breeding quite like New Guinea's birds of paradise. Here in the sweaty, vine-tinged jungle, the male birds' intricately choreographed hops, shakes, flaps and flutters send the females quivering.

Mysteries of the Unseen World: Audiences will be transported to places on the planet they've never been before, to see things that are beyond their normal vision yet are literally right in front of their eyes.

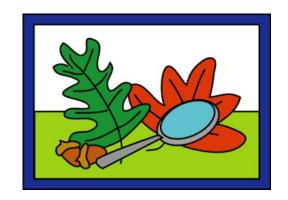


Refuge Naturalists **GRADUATE!**

19 participants recently graduated from the second offering of the refuge's naturalist training program—a yearlong program that prepares refuge volunteers to develop and/or deliver environmental education and/or interpretive programs.

Following a competitive selection process, program participants attended one daylong training session each month for a year. Each training session focused on a specific refuge habitat, related wildlife, and the research and management activities that are occurring in that habitat. Students also learned about the local history of refuge, Plum Island, and the local area. The informal training sessions were comprised of lecture, small group work, and many field trips to the refuge.

These specially trained volunteers will contribute in a variety of ways. All were encouraged to pursue those topics and target audiences (e.g., kids, adults, etc.) for which/whom they have a particular interest. Some will likely gravitate to leading programs and otherwise working with the public. Others will opt for more of a behind-the-scenes role — e.g., writing articles for this publication! All will add great value to the visitor services program at Parker River National Wildlife Refuge!



Gone But Not Forgotten, or "Oral Histories R Us!"

By Matt Poole, Visitor Services Manager

Ever since I arrived at Parker River in September of 2010, we have talked off and on about how "cool" it would be to interview long-retired refuge employees to capture what it was like to work at the refuge in the early years. Recently we moved beyond the talking stage and actually conducted two "oral histories." Tom Stubbs was the first person to be interviewed. Tom started work at the refuge in the late 1940s as a

maintenance worker and remained on the staff for the next forty years! He was there almost at the very beginning of the refuge and was very involved in the construction of the series of dikes that trap water in our impoundments. At one point during our conversation Tom made reference to the "new headquarters building" – a reference which caused me to scratch my head for a moment before realizing that he was talking about the *old* headquarters on the north end of Plum Island! That structure was built in the mid 1950s.

In early May we had an opportunity to interview Don Grover, who worked at the refuge as a fulltime law enforcement officer from the early 1960s until the late 1980s. We had been forewarned that Mr. Grover is a very good storyteller. Suffice it to say, he didn't disappoint! Don worked on the refuge during the heyday of visitation, when the annual total was twice of what it is today. His entertaining stories conjured visions of the "Wild West!" Tom Stubbs, who has stayed in touch with Don over the years,



Tom Stubbs operating a bulldozer on the refuge, probably in the mid-1950s.



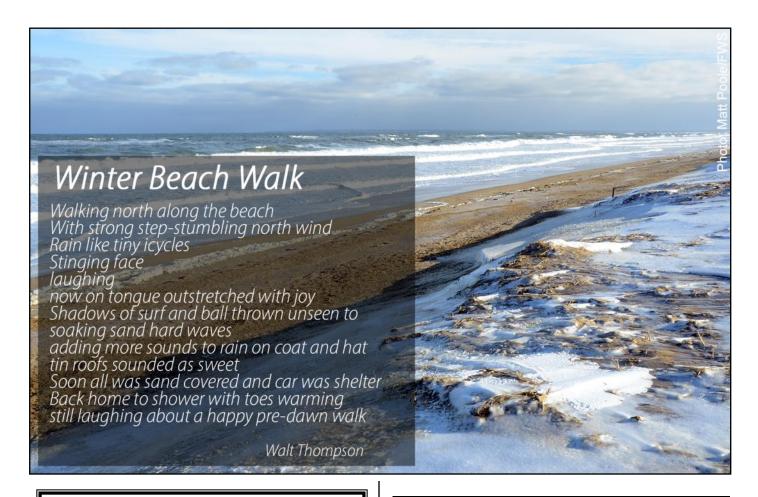
was able to participate in the interview. It wasn't until the very end of the interview that Tom mentioned, in passing, that he and Don had not actually been in the same room for more than 20 years. The photo above documents their in-person re-acquaintance!

Both Tom Stubbs and Don Grover have been very generous with their refuge history-sharing. Two stalwart volunteers — Alix McArdle and Victor Tine — have been very instrumental in the success of the oral histories that we've completed to date. Here's hoping that there will be many more to come!

Editor's Note: This article from the Summer, 2013 edition of *The Wrack Line*, is reprinted here in memory of Tom Stubbs, who passed away in late February. He was 88 years old. He devoted 40 of those years to public service at Parker River National Wildlife Refuge — from 1947-1987. Tom, who was here at almost the very beginning of this refuge, witnessed and contributed so much over the years.

A couple of years ago we invited Tom to participate in an oral history interview at refuge headquarters. And boy, did he participate! With great pride and enthusiasm, he shared many stories of how it was back then. But he was equally curious about how things are <u>now</u> at the refuge.

Over the last couple of years, Tom would frequently drop by headquarters to chat, reminisce, and look at old annual reports (with photos). Clearly, the refuge meant a lot to him. And, particularly after having a chance to get to know him, the entire staff recognized how important Tom Stubbs was, and remains, to this national wildlife refuge. We will miss him. Some of us already do.



UPCOMING EVENTS

- American Conservation
 Film Festival NORTH
 - ⇒ April lst—3rd
- Earth Day Family Film
 - ⇒ Friday, April 22nd
- Let's Go Outside
 - ⇒ Saturday, June 18th

Remember to check the refuge homepage for the most current schedule of all programs and events.

The Wrack Line, Parker River National Wildlife Refuge's newsletter, is generally published on a quarterly basis—fall, winter, spring, and summer.

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